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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,287	03/01/2005	Gregg D. Wilensky	07844-558US1/P513	6269
21876 7590 07/23/2009 FISH & RICHARDSON P.C. P.O. Box 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER BROMELL, ALEXANDRIA Y	
			ART UNIT 2167	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/526,287	<b>Applicant(s)</b> WILENSKY, GREGG D.	
	<b>Examiner</b> ALEXANDRIA Y. BROMELL	<b>Art Unit</b> 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 60 - 80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60 - 80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/23/2009</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 23, 2009 has been entered.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on June 23, 2009 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 60 – 61, 67 – 68, 71 – 72, and 78 - 80 are rejected under 35

U.S.C. 102(a) as being anticipated by Kresimir Matkovic et al. ("Visual Image Query", ACM, June 11 – 13, 2002, pages 116 - 123), hereinafter, "Matkovic."

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With respect to claim 60, Matkovic teaches receiving a plurality of reference images (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea, lines 1 - 3), calculating by a computer image parameters for each reference image wherein the image parameters characterize color, texture and shape features that are common to the reference image and at least one other reference image (i.e. parameters are calculated for reference and instant images, page 117, 3: Main Idea, lines 5 - 11), combining by the computer the calculated image parameters to generate a composite reference image (i.e. image parameters are reduced to generate a composite image, page 117, 3: Main Idea, lines 5 – 6), comparing by the computer the composite reference image to images in a collection in order to identify one or more of the images having features described by the composite reference image (input image is compared to other reference images based on calculated parameters, page 117, 3: Main Idea, lines 15 - 25).

With respect to claim 61, Matkovic teaches the reference images are ranked and wherein calculating parameters for each reference image includes weighting the parameters based on each reference image's rank (i.e. input image is compared to other reference images based on calculated parameters, page 117, 3: Main Idea, lines 22 – 24).

With respect to claim 67, Matkovic teaches calculating image parameters for the one or more images in the collection (i.e. image parameters are calculated for all images in a collection, page 117, 3: Main Idea, lines 1 – 3).

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With respect to claim 68, Matkovic teaches comparing the composite reference image to parameters of each of the one or more images in the collection (i.e. query image (composite image) compared to images in collection, page 117, 3: Main Idea, lines 15 - 17).

With respect to claim 71, Matkovic teaches receiving a plurality of reference images (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea, lines 1 - 3), calculating by a computer image parameters for each reference image wherein the image parameters characterize color, texture and shape features that are common to the reference image and at least one other reference image (i.e. parameters are calculated for reference and instant images, page 117, 3: Main Idea, lines 5 - 11), combining by the computer the calculated image parameters to generate a composite reference image (i.e. image parameters are reduced to generate a composite image, page 117, 3: Main Idea, lines 5 - 6), comparing by the computer the composite reference image to images in a collection in order to identify one or more of the images having features described by the composite reference image (input image is compared to other reference images based on calculated parameters, page 117, 3: Main Idea, lines 15 - 25).

With respect to claim 72, Matkovic teaches reference images are ranked and wherein calculating parameters for each reference image includes weighting the parameters based on each reference image's rank (i.e. input image is compared to other reference images based on calculated parameters, page 117, 3: Main Idea, lines 22 - 24).

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With respect to claim 78, Matkovic teaches calculating image parameters for the one or more images in the collection (i.e. image parameters are calculated for all images in a collection, page 117, 3: Main Idea, lines 1 – 3).

With respect to claim 79, Matkovic teaches comparing the composite reference image to parameters of each of the one or more images in the collection (i.e. query image (composite image) compared to images in collection, page 117, 3: Main Idea, lines 15 - 17).

With respect to claim 80, Matkovic teaches one or more computers operable to execute the program product, interact with the display device, and perform operations comprising receiving a plurality of reference images (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea, lines 1 - 3), calculating by a computer image parameters for each reference image wherein the image parameters characterize color, texture and shape features that are common to the reference image and at least one other reference image (i.e. parameters are calculated for reference and instant images, page 117, 3: Main Idea, lines 5 - 11), combining by the computer the calculated image parameters to generate a composite reference image (i.e. image parameters are reduced to generate a composite image, page 117, 3: Main Idea, lines 5 – 6), comparing by the computer the composite reference image to images in a collection in order to identify one or more of the images having features described by the composite reference image (input image is compared to other reference images based on calculated parameters, page 117, 3: Main Idea, lines 15 - 25).

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 62 – 64, and 73 - 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kresimir Matkovic et al. (“Visual Image Query”, ACM, June 11 – 13, 2002, pages 116 - 123) in view of Essam El—Kwae et al. (“A Robust Framework for Content – Based Retrieval by Spatial Similarity in Image Databases,” ACM, 1999, pages 174 - 198), hereinafter, “El - Kwae.”

With respect to claim 62, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39). Matkovic does not explicitly teach raster data as claimed.

However, El-Kwae teaches a reference image includes raster data (i.e. reference image includes shape data, page 175, line 7).

Matkovic and El – Kwae are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of El – Kwae in order to search for and retrieve images using spatial similarity (El – Kwae, page 174, lines 1 - 5).

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With respect to claim 63, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39). Matkovic does not explicitly teach vector data as claimed.

However, El-Kwae teaches a reference image includes vector data (i.e. images have vector data, page 181, line 30).

Matkovic and El – Kwae are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of El – Kwae in order to search for and retrieve images using spatial similarity (El – Kwae, page 174, lines 1 - 5).

With respect to claim 64, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39). Matkovic does not explicitly teach audio objects as claimed.

However, El-Kwae teaches the collection includes audio objects (i.e. may be implemented with audiovisual search engines, page 178, line 15)).

Matkovic and El – Kwae are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of El – Kwae in order to search for and retrieve images using spatial similarity (El – Kwae, page 174, lines 1 - 5).



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With respect to claim 73, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39). Matkovic does not explicitly teach raster data as claimed.

However, El-Kwae teaches a reference image includes raster data (i.e. reference image includes shape data, page 175, line 7).

Matkovic and El – Kwae are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of El – Kwae in order to search for and retrieve images using spatial similarity (El – Kwae, page 174, lines 1 - 5).

With respect to claim 74, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39). Matkovic does not explicitly teach vector data as claimed.

However, El-Kwae teaches a reference image includes vector data (i.e. images have vector data, page 181, line 30).

Matkovic and El – Kwae are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of El – Kwae in order to search for and retrieve images using spatial similarity (El – Kwae, page 174, lines 1 - 5).

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With respect to claim 75, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39). Matkovic does not explicitly teach audio objects as claimed.

However, El-Kwae teaches the collection includes audio objects (i.e. may be implemented with audiovisual search engines, page 178, line 15).

Matkovic and El – Kwae are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of El – Kwae in order to search for and retrieve images using spatial similarity (El – Kwae, page 174, lines 1 - 5).

Claims 65 – 66, and 76 - 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kresimir Matkovic et al. (“Visual Image Query”, ACM, June 11 – 13, 2002, pages 116 - 123) in view of Essam El—Kwae et al. (“A Robust Framework for Content – Based Retrieval by Spatial Similarity in Image Databases,” ACM, 1999, pages 174 - 198) in view of Howard Wactlar et al. (U.S. Patent 5,835,667), hereinafter, “Wactlar.”

With respect to claim 65, Matkovic teaches combining further comprises receiving one or more reference objects (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea, lines 1 - 3), and El – Kwae teaches searching and retrieving images using special similarity (page 174, lines 1 - 5). The combination of Matkovic and El - Kwae does not explicitly disclose calculating and searching sound and video objects as claimed.

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However, Wactlar teaches calculating sound parameters for each reference audio object wherein the sound parameters characterize sound features in the reference object that map to image parameters of at least one reference image (i.e. audio data is transcribed and indexed, column 4, lines 34 - 41), combining the sound parameters with the image parameters to produce composite reference information (i.e. segmented audio/video data is combined, column 6, lines 45 - 54).

Matkovic, El – Kwae, and Wactlar are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic and El – Kwae with the teachings of Wactlar in order to improve video searching capabilities (column 4, lines 9 - 16).

With respect to claim 66, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39), and El – Kwae teaches searching and retrieving images using special similarity (page 174, lines 1 - 5). The combination of Matkovic and El - Kwae does not explicitly disclose calculating and searching sound and video objects as claimed.

However, Wactlar teaches comparing the composite reference information to images and sound objects in a collection in order to identify one or more of the images or the sound objects having features described by the composite reference information (i.e. images, videos, and sounds are compared to find similar objects, column 12, lines 33 - 40).

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Matkovic, El – Kwae, and Wactlar are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic and El – Kwae with the teachings of Wactlar in order to improve video searching capabilities (column 4, lines 9 - 16).

With respect to claim 76, Matkovic teaches receiving one or more reference audio objects (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea, lines 1 - 3), and El – Kwae teaches searching and retrieving images using special similarity (page 174, lines 1 - 5). The combination of Matkovic and El - Kwae does not explicitly disclose calculating and searching sound and video objects as claimed.

However, Wactlar teaches calculating sound parameters for each reference audio object wherein the sound parameters characterize sound features in the reference sound object that map to image parameters of at least one reference image (i.e. audio data is transcribed and indexed, column 4, lines 34 - 41), combining the sound parameters with the image parameters to produce composite reference information (i.e. segmented audio/video data is combined, column 6, lines 45 - 54).

Matkovic, El – Kwae, and Wactlar are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic and El – Kwae with the teachings of Wactlar in order to improve video searching capabilities (column 4, lines 9 - 16).

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With respect to claim 77, Matkovic teaches a visual image query method (Introduction, page 116, lines 36 - 39), and El - Kwae teaches searching and retrieving images using special similarity (page 174, lines 1 - 5). The combination of Matkovic and El - Kwae does not explicitly disclose calculating and searching sound and video objects as claimed.

However, Wactlar teaches comparing the composite reference information to images and sound objects in a collection in order to identify one or more of the images or the sound objects having features described by the composite reference information (i.e. images, videos, and sounds are compared to find similar objects, column 12, lines 33 - 40).

Matkovic, El - Kwae, and Wactlar are analogous art because they are from the same field of endeavor of image searching. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic and El - Kwae with the teachings of Wactlar in order to improve video searching capabilities (column 4, lines 9 - 16).

Claims 69 - 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kresimir Matkovic et al. ("Visual Image Query", ACM, June 11 - 13, 2002, pages 116 - 123) in view of Howard Wactlar et al. (U.S. Patent 5,835,667), hereinafter, "Wactlar."

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With respect to claim 69, Matkovic teaches receiving a plurality of reference objects (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea, lines 1 - 3).

Matkovic does not explicitly disclose that the reference objects are video objects.

However, Wactlar teaches calculating by a computer video parameters for each reference video object wherein the video parameters characterize image and audio features in the reference video object that are common to the reference video object and at least one other reference video object (i.e. audio data is transcribed and indexed, column 4, lines 34 - 41), combining by the computer the video parameters to generate composite reference information (i.e. segmented audio/video data is combined, column 6, lines 45 - 54), comparing by the computer the composite reference information to video objects in a collection in order to identify one or more of the video objects having features described by the composite reference information (i.e. images, videos, and sounds are compared to find similar objects, column 12, lines 33 - 40).

Matkovic and Wactlar are analogous art because they are from the same field of endeavor of similarity searching.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of Wactlar in order to improve video searching capabilities (column 4, lines 9 - 16).

With respect to claim 70, Matkovic teaches receiving a plurality of reference objects (i.e. target images, or reference images are retrieved, page 117, 3: Main Idea,

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lines 1 - 3). Matkovic does not explicitly disclose that the reference objects are text objects.

However, Wactlar teaches calculating by a computer text parameters for each reference text object wherein the text parameters characterize language features in the reference text object that are common to the reference text object and at least one other reference text object (i.e. textual parameters are calculated, column 6, lines 39 - 54), combining by the computer the text parameters to generate composite reference text (i.e. text, audio, and video are combined for similarity matching, column 7, lines 21 - 34), and comparing by the computer the composite reference text to text objects in a collection in order to identify one or more of the text objects having features described by the composite reference text (i.e. full text search is performed, column 5, lines 14 - 24).

Matkovic and Wactlar are analogous art because they are from the same field of endeavor of similarity searching.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Matkovic with the teachings of Wactlar in order to improve video searching capabilities (column 4, lines 9 - 16).

***Conclusion/Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDRIA Y. BROMELL whose telephone number is (571)270-3034. The examiner can normally be reached on M - R 9 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexandria Y Bromell/  
Examiner, Art Unit 2167  
July 14, 2009

/Shahid Al Alam/  
Primary Examiner, Art Unit 2162